

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0012] with the following amended paragraph:

[0012] U.S. Patent No. 6,174,737 B1 issued to Durlam et al., discloses an MRAM is having a bit line, a magnetic memory element, and an electrically conductive layer disposed between the bit line and the magnetic memory element. Durlam et al. also discloses a Permalloy field focusing layer used in conjunction with both bit and digit lines. Durlam et al. does not explain specifically how a field focusing layer functions, except to say that a field focusing layer “facilitates magnetic fields to concentrate on the magnetic memory element.” It is surmised that the term “field focusing” is meant to imply that the layer serves to bend, reflect, or otherwise focus the magnetic field generated by the bit line or digit line in the direction of the magnetic memory element. Accordingly, Durlam et al. does not interpose a Permalloy layer between the digit or bit lines and the magnetic memory element because such a layer would tend to block the focusing effect and deflect the magnetic field away from the magnetic memory element.

Please replace paragraph [0023] with the following amended paragraph:

[0023] ~~FIG. 3 is~~ FIGs. 3A and 3B are cross-sectional representations of ~~an~~ embodiments of an MRAM cell of the invention;

Please replace paragraph [0027] with the following amended paragraph:

[0027] FIG. 3A is a cross-section of an MRAM cell 40 including a magnetic tunnel junction (MTJ) 42, a bit line segment 44, and a digit line segment 46 arranged essentially as described above with respect to FIG. 1. The bit line segment 44 includes a top surface 50 opposite a bottom surface 52 that is in electrical contact with the free layer 48. The bit line segment 44 also includes first and second vertical surfaces 54 and 56 opposite one another and connecting the top and bottom surfaces 50 and 52.

Please replace paragraph [0029] with the following amended paragraph:

[0029] In some embodiments the magnetic liner layer 58 is formed of an electrically conductive material such as Permalloy. In these embodiments the read and write currents are carried by both the bit line segment 44 and the magnetic liner layer 58. The electrically conductive magnetic liner layer 58 allows for the cross-sectional area of the bit line segment 44 to be reduced with the difference made up by the magnetic liner layer 58, as shown in FIG. 3A. Other possible materials for the liner layer 58 include CoZrCr, CoZrNb, CoZrRe, FeSiAl, FeN, FeAlN, FeRhN, and FeTaN. FIG. 3B shows another exemplary embodiment of the invention. In this embodiment the magnetic liner layer 58' forms a sheath entirely around the bit line 44 as is also shown in FIG. 16. Additionally, free layer 48' is formed of two ferromagnetic layers 48 a and 48b, and pinned layer 62 is formed of two ferromagnetic layers 62a and 62b separated by a spacer layer 64, both as described below in paragraph [0035] and in Table 1.